Moore’s Branch Stream Study

<table>
<thead>
<tr>
<th>Sample Point</th>
<th>pH</th>
<th>Conductivity</th>
<th>Temperature</th>
<th>Nitrates (ppm)</th>
<th>Ammonium</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Upstream By the houses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. Downstream by Kentucky Ave.</td>
<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Bacteria Present Positive/Negative</th>
<th>Dissolved Oxygen Percent Saturation (ppm)</th>
<th>Stream Flow Rate High/Normal/Low</th>
<th>Stream Appearance Clear/Cloudy/Muddy</th>
<th>Water Odor</th>
<th>Bank Erosion</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>A.</td>
<td>A.</td>
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</tr>
<tr>
<td>B.</td>
<td>B.</td>
<td>B.</td>
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<td>B.</td>
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</table>
Watershed Video

Answer the following questions while watching the video.

1. Describe the importance of water as an abiotic factor.

2. Describe the processes of the water cycle. Illustrate it below.

3. What is a watershed?

4. How do the different surface features in Kentucky affect the watershed?

5. Distinguish between non-point source pollution and point source pollution. Provide an example of each.

After video:

6. Map the water flow from our area to the Gulf of Mexico:
   Moore's Branch Creek
Topics

Erosion

History of Creek

Where did the name Moore’s Creek come from?

Why this location for the town of Corbin?

Corbin as a swampland

Vegetation

Algae Bloom

Types of Trees

Coverage – Affect on water temperature

Water Temperature Variance

Litter – Sustainability (How long will some litter remain); Affect on wildlife

Source of Creek

What Feeds Into Creek?

Where does the Creek go?

Tributaries
Grease – Road
Flooding
Dry Periods
Chemicals in the Creek
Agricultural Effects
Velocity of the Creek
Wildlife along and in the Creek like Snakes and Fish and Tadpoles
Insects – Life Cycle
Food Web
Fecal Matter
This is how the poster should be laid out

Title

5 Facts

Pictures and Descriptions

Conclusion

Group Members

Resources
### Rubric for poster.

**Moore's Branch Stream Study**

**Teacher Name:**

**Student Name:**

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Title</strong></td>
<td>Title can be read from 6 ft. away and is quite creative. 10 points</td>
<td>Title can be read from 4 ft. away and describes content well. 8 points</td>
<td>Title is too small and/or does not describe the content well. 6 points</td>
<td>The title is too small and/or does not describe the content. 4 points</td>
</tr>
<tr>
<td><strong>Content - Accuracy</strong></td>
<td>At least 5 accurate facts are displayed on the poster. 30 points</td>
<td>3-4 accurate facts are displayed on the poster. 25 points</td>
<td>1-2 accurate facts are displayed on the poster. 20 points</td>
<td>Less than 3 accurate facts are displayed on the poster. 10 points</td>
</tr>
<tr>
<td><strong>Project Summary</strong></td>
<td>Student can accurately answer all questions related to facts in the poster and processes used to create the poster. 30 points</td>
<td>Student can accurately answer most questions related to facts in the poster and processes used to create the poster. 25 points</td>
<td>Student can accurately answer about 75% of questions related to facts in the poster and processes used to create the poster. 20 points</td>
<td>Student appears to have insufficient knowledge about the facts or processes used in the poster. 10 points</td>
</tr>
<tr>
<td><strong>Graphics - Originality</strong></td>
<td>Several of the graphics used on the poster reflect a exceptional degree of student creativity in their creation and/or display. 20 points</td>
<td>One or two of the graphics used on the poster reflect student creativity in their creation and/or display. 15 points</td>
<td>The graphics are made by the student, but are based on the designs or ideas of others. 10 points</td>
<td>No graphics made by the student are included. 5 points</td>
</tr>
<tr>
<td><strong>Mechanics/Grammar</strong></td>
<td>Capitalization and punctuation are correct throughout the poster. 10 points</td>
<td>There is 1 error in capitalization or punctuation. 8 points</td>
<td>There are 2 errors in capitalization or punctuation. 6 points</td>
<td>There are more than 2 errors in capitalization or punctuation. 4 points</td>
</tr>
</tbody>
</table>

**Group Members:**

1.
2.
3.
4.